



THE WEIZMANN SCIENCE PRESS OF ISRAEL

National Council for Research and Development

ISRAEL **Journal of** **MATHEMATICS**

Volume 60
1987



מוסד ויצמן לפרסומים במדעי הטבע ובטכנולוגיה, ירושלים
THE WEIZMANN SCIENCE PRESS OF ISRAEL

Publishers of the Following Journals

ISRAEL JOURNAL OF BOTANY; ISRAEL JOURNAL OF CHEMISTRY;
 ISRAEL JOURNAL OF EARTH-SCIENCES; ISRAEL JOURNAL OF MATHEMATICS;
 ISRAEL JOURNAL OF TECHNOLOGY; ISRAEL JOURNAL OF ZOOLOGY;

JOURNAL D'ANALYSE MATHÉMATIQUE

(SCIENCE FOR YOUTH) **לרשת מדע לנוער**

(SCIENCE) **בזמן עתון מדעי לכל**

Supporting Institutions

THE NATIONAL COUNCIL FOR RESEARCH AND DEVELOPMENT;
 BAR-ILAN UNIVERSITY; BEN GURION UNIVERSITY OF THE NEGEV;
 TECHNION — ISRAEL INSTITUTE OF TECHNOLOGY; TEL AVIV UNIVERSITY;
 THE HEBREW UNIVERSITY OF JERUSALEM; THE WEIZMANN INSTITUTE OF SCIENCE

GENERAL EDITORIAL BOARD

D. ABIR
 A. DVORETZKY
 C. ELATA
 H. EYAL-GILADI
 M. JAMMER
 J. JORTNER
 E. LENZ
 L. REINHOLD

Executive Editor

P. GREENBERG

**ISRAEL JOURNAL
 OF MATHEMATICS**

Formerly: Bulletin of The Research Council
 of Israel, Section F

Editorial Board

H. M. FARKAS
The Hebrew University of Jerusalem
Executive Editor
 S. ABARBANEL
Tel Aviv University
 S. A. AMITSUR
The Hebrew University of Jerusalem
 H. FURSTENBERG
The Hebrew University of Jerusalem
 B. GRÜNBAUM
University of Washington
 A. LEVY
The Hebrew University of Jerusalem
 J. LINDENSTRAUSS
The Hebrew University of Jerusalem
 M. MAGIDOR
The Hebrew University of Jerusalem
 A. PAZY
The Hebrew University of Jerusalem
 B. WEISS
The Hebrew University of Jerusalem

Four volumes of the Israel Journal of Mathematics are to be published in 1987,
 Vols. 57, 58, 59 and 60

Subscriptions should be addressed to the Weizmann Science Press of Israel, P.O.B.
 801, Jerusalem 91007 Israel. Subscription fees per volume, U.S.\$50.00 + \$2.00 postage
 & handling (\$200.00 + \$8.00 postage & handling for the 4 vols.). Individual members of
 mathematical societies may subscribe at a 50% discount.

© 1987 THE WEIZMANN SCIENCE PRESS OF ISRAEL

Typeset & Printed at Ben-Zvi Printing Enterprises Ltd., Jerusalem

ISRAEL JOURNAL OF MATHEMATICS

TABLE OF CONTENTS, VOLUME 60, 1987

BIERSTONE, E. AND P. D. MILMAN Local analytic invariants and splitting theorems in differential analysis	257
BOURGAIN, J. Construction of sets of positive measure not containing an affine image of a given infinite structure	333
BRAUN, A. Localization in noetherian P.I. rings as a finite criterion	54
CHIN, W. Prime ideals in restricted differential operator rings	236
EDA, K. A characterization of ω_1 -free abelian groups and its application to the Chase radical	22
FINET, C. Subspaces of Asplund Banach spaces with the point continuity property	191
GÓMEZ PARDO, J. L. The rational Loewy series and nilpotent ideals of endomorphism rings	315
GROEMER, H. Stability theorems for projections of convex sets	177
HAAGERUP, U. A new upper bound for the complex Grothendieck constant	199
KRA, I. Families of univalent functions and Kleinian groups	89
KRIEGER, W. On sofic systems II	167
LUBARSKY, R. S. Admissibility spectra through ω_1	225
LUNARDI, A. On the evolution operator for abstract parabolic equations	281
MATSUOKA, C. A certain class of Jensen measures for uniform algebras	129
MCLAUGHLIN, T. G. Embeddings of and into Nerode semirings	65
MILMAN, P. D. <i>See</i> E. Bierstone	
MOROZ, B. Z. Estimates for character sums in number fields	1
MÜLLER, P. F. X. On the span of some three valued martingale difference sequences in L^1 ($1 < p < \infty$) and H^1	39
ROSENTHAL, A. Strictly ergodic models and topological mixing for Z^2 -action	31
SHELAH, S. Iterated forcing and normal ideals on ω_1	345
SHELAH, S. On reconstructing separable reduced p -groups with a given socle	146

